or a derivative, homologue, analogue, chemical equivalent, antagonist or agonist thereof for a time and under conditions sufficient for the modulation of osteoclastogenesis.

2. **(Amended)** **[A]**The method according to Claim 1 wherein the leptin or its derivative, homologue, antagonist or agonist comprises an amino acid sequence having at least 60% similarity to the amino acid sequence set forth in **[<400>7]**SEQ ID NO:7 after optimal alignment.

3. **(Amended)** **[A]**The method according to Claim 1, wherein the leptin or its derivative, homologue, antagonist or agonist is encoded by the nucleotide sequence set forth in **[<400>8]**SEQ ID NO:8 or a nucleotide sequence having at least 60% similarity to **[<400>8]**SEQ ID NO:8 after optimal alignment or a nucleotide sequence capable of hybridizing to **[<400>8]**SEQ ID NO:8 or its complementary from under low stringency conditions at 42°C.

4. **(Amended)** **[A]**The method according to Claim 1 **[or 2 or 3]** wherein the modulation comprises a reduction in bone resorption.

5. **(Amended)** **[A]**The method according to Claim 4 **[for the treatment]**wherein said bone resorption is a result of osteoporosis or Paget's disease.

6. **(Amended)** A method for inhibiting, reducing or otherwise delaying onset or progression of bone resorption in an **[human or]** animal, said method comprising administering to said **[human or]** animal an effective amount of a leptin or a derivative, homologue, analogue, chemical equivalent or agonist thereof for a time and under conditions sufficient to inhibit, reduce or otherwise delay onset or progression of osteoclastogenesis.

7. **(Amended)** **[A]**The method according to Claim 6, wherein the leptin or its derivative, homologue, antagonist or agonist comprises an amino acid sequence having at least 60% similarity to the amino acid sequence set forth in **[<400>7]**SEQ ID NO:7 after optimal alignment.

8. **(Amended)** **[A]**The method according to Claim 7 wherein the leptin or its derivative, homologue, antagonist or agonist comprises an amino acid sequence have at least 60% similarity to the amino acid sequence set forth in **[<400>7]**SEQ ID NO:7 after optimal alignment.

9. **(Amended)** **[A]**The method according to Claim 6 **[or 7 or 8 for the treatment]**wherein said bone resorption is a result of osteoporosis or Paget's disease.

10. **(Amended)** A composition for modulating bone resorption, comprising a leptin **[or a derivative, homologue, analogue, chemical equivalent, antagonist or agonist thereof]**having at least 60% similarity to the amino acid sequence set forth in SEQ ID NO:7 and one or more pharmaceutically acceptable carriers and/or diluents **[when used for modulating bone resorption]**.

13. **(Amended)** A method for inhibiting osteoclastogenesis in an **[human or]** animal, said method comprising administering to said **[human or]** animal an amount of a leptin or a derivative, homologue, analogue, chemical equivalent or agonist thereof effective to antagonize the osteoclastic effect of osteoclast differentiation factor (ODF) by stimulation of Osteoprotegrin (OPG) and/or inhibition of receptor activator of NF-kappa β (RANK) expression.

14. **(Amended)** **[A]**The method according to Claim 13, wherein the leptin or its derivatives, homologue, antagonist or agonist comprises an amino acid sequence having at least 60% similarity to the amino acid sequence set forth in **[<400>7]**SEQ ID NO:7 after optimal alignment.

15. **(Amended)** **[A]**The method according to Claim 13 wherein the leptin or its derivative, homologue, antagonist or agonist is encoded by the nucleotide sequence set forth in **[<400>8]**SEQ ID NO:8 or a nucleotide sequence having at least 60% similarity to **[<400>8]**SEQ ID NO:8 after optimal alignment or a nucleotide sequence capable of hybridizing to **[<400>8]**SEQ ID NO:8 or its complementary form under low stringency conditions at 42°C.

16. **(Amended)** **[A]**The method according to Claim 13 **[or 14 or 15 for the treatment of]**wherein said bone resorption is a result osteoporosis or Paget's disease.

Please add the following claims:

17. The method of Claim 1 wherein said animal is a human.

18. The method of Claim 6 wherein said animal is a human.

19. The method of Claim 13 wherein said animal is a human.

REMARKS

The claims have been amended to conform to the rules of practice specified by the U.S. Patent and Trademark Office. Claims 11 and 12 have been canceled. Claims 17-19 have been added. No new matter has been added herewith. As a result of this Preliminary Amendment, Claims 1-10, and 13-19 are presented for examination.